

ture of 30° to 35° C. In this a glass cylinder was placed, in which the dead frog was hung. To prevent dryness, a wet sponge was placed at the bottom of the glass cylinder. In the first series of experiments, the frogs were killed by a subcutaneous injection of cyanide of potassium, and then the sciatic of one leg was divided. In 72.2 per cent. of the cases, the nervous system was found to accelerate the appearance of the rigor mortis. In a second series of experiments, the animals were killed by cyanide of potassium, and one of the sciatics divided. To eliminate the influence of the nervous system, the brain and spinal cord were destroyed. In nearly all, the appearance of rigidity was the same in both extremities. After eliminating the frogs killed by destroying the spinal cord, or by strychnia, or by woorari; there was no difference in the appearance of the rigor mortis. He also made experiments upon white rats, killed by bleeding. In all these animals, the rigidity of death came on earlier in the limb with the sciatic intact.—*Pflüger's Archiv*, Band xxxv., Heft 1 and 2.

THE BRAIN.—Herr Christiani has made a series of experiments upon this subject, on rabbits and dogs.

Of the higher respiratory centres, he found three in the basal ganglia. First, an inspiratory one, chiefly reflex, at the bottom of the third ventricle; second, an inspiration-centre, at the section between the anterior and posterior corpora quadrigemina; third, an expiratory- and inhibitory-centre at the entrance of the aqueduct of Sylvius. He also discovered, anterior to the inspiratory-centre in the third ventricle, a co-ordination-centre for the equilibrium. If the cerebral hemispheres are removed, so that bleeding does not ensue, and the animal, after the operation, is released, the temperature is still at the normal height; but if the centres in the optic thalami are extirpated, the temperature in animals who live falls from 3° to 5° C. in the first quarter of an hour. In a three-year-old dog, he removed the brain to the optic thalami; the animal lived a few hours. He observed here the inspiration- and expiration-centre in the third ventricle and the anterior corpora quadrigemina, as in rabbits. The reflex activity of the pupil and eyelids was retained, as was that of hearing. Rabbits, with the cerebrum removed, can evade obstacles, although not always elegantly, for the circulatory conditions of the retina are changed.—*DuBois' Arch.*, 1884, 4 and 5 Heft.

THE BRAIN.—Prof. Munk read a reply to the preceding paper of Herr Christiani. It is well known that Prof. M. found extirpation of certain parts of the hemispheres was followed by blindness. Not long after this discovery, Herr C. found that rabbits whose cerebrum was removed both saw and heard. Munk has repeated the experiments of Christiani on rabbits, and arrived at the conclusion that animals, from whom the cerebrum was removed, did not avoid obstacles, but were completely blind, and made no spon-

taneous movement. He makes numerous criticisms of the methods employed by Christiani.—*DuBois' Arch.*, 1884, 4 and 5 Heft.

THE PARALYTIC ACTION OF STRYCHNIA.—Herr Paul Bongers has made a series of experiments concerning the relation of strychnia to the motor nerves. He found, as many other observers did, that it paralyzed the motor nerves by a direct action on them and by the exhaustion consequent to the convulsive movements.—*DuBois' Arch.*, 1884, 4 and 5 Heft.

THE RESPIRATION ON A HIBERNATING HEDGEHOG.—Herr Paul Bongers has made a series of experiments upon this subject. He compared the breathing of chloralized hedgehogs with that of hibernating ones. He found that the state of narcosis differed from that of hibernation, as in the former it was not periodical but rhythmic, whilst in the latter it was periodical.—*DuBois' Arch.*, 1884, 4 and 5 Heft.

THE ACTION OF ERGOTIN, ERGOTININ, AND SCLEROTINIC ACID UPON THE BLOOD-PRESSURE, UTERINE MOVEMENTS, AND BLEEDING.—Herr Max Marckwald has made a series of experiments with these drugs. He used rabbits. It was discovered that the uterine contractions were independent of changes in the blood-pressure. His results were as follows :

1. Ergotinin is not to be used either as a hæmostatic or an oxytocic.
2. Dialyzed ergotin and sclerotic acid are able to cause contraction of the uterus and arrest of hemorrhage from this organ.
3. Sclerotic acid caused a depression of the arterial tension, and at the same time a general hæmostatic action. He confirms the view of Nikitin, that sclerotic acid is chiefly the active principle of ergot. Sclerotic acid is used in smaller doses than ergotin, but the former or its salts cannot be used hypodermically; here dialyzed ergotin must be employed. Generally the dose for man is too small.

For uterine fibroids the single dose should be at least 5 grammes of pure ergotin, whilst as a hæmostatic 1 to 2 grammes should be given at a dose. *DuBois' Arch.*, 1884, 4 and 5 Heft.

THE INNERVATION OF THE PYLORUS.—Dr. Oser has made a number of experiments upon dogs. His results are as follows :

1. By divided vagi and splanchnics, as well as by the uninjured nerves, the pylorus shows contraction of different intensity and irregularity.
2. Irritation of the vagi in the neck constantly calls out a contraction of the pylorus; the more intense the irritation, the greater the contraction.
3. Irritation of the splanchnics in the thorax depresses the spontaneous contractions of the pylorus. The action of the splanchnics is gradually generated, and reaches its